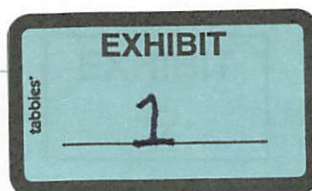


ECONOMIC ANALYSIS
OF
JEREMY T. RUSSELL

Preliminary Pre-trial Report
(subject to revision)
February 8, 2023

Mississippi Consulting Group, Inc.
George H. Carter, Ph.D.




SCENARIO VALUED

If not for death, Jeremy Russell would have been released from prison on September 8, 2025 and entered the work force. He would have worked for a representative income for his work life expectancy, and he would have maintained a household for himself for his life expectancy.

CONCLUSION

On the basis of information given, the economic loss incurred by Jeremy Russell as the result of death on October 7, 2021, is \$376,846. discounted to present value.

In general, it is recognized that discovery is on-going. Consequently, as further information becomes available, the right is reserved to supplement this report.


George H. Carter, Ph.D.

George H. Carter

PERSONAL INFORMATION

Date of Report
February 8, 2023

(Information was provided by employing attorney,
source documents identified in the various notes
or calculation.)

NAME: Jeremy T. Russell.

GENDER, RACE, ETHNICITY: Male, African-American,
Non-Hispanic.

DATE OF BIRTH: February 12, 2000.

EDUCATION: Less than high school diploma.

MARITAL STATUS AND FAMILY: Single. No dependents.

CHRONOLOGY

DATE OF DEATH: October 7, 2021.

SUBJECT'S AGE AT DEATH: 21.7 years old
(age range: 21-22).

DATE OF EXPECTED PRISON RELEASE: September 8, 2025.

SUBJECT'S AGE AT SUBJECT'S EXPECTED RELEASE:
25.6 years old. (nearest birthday: 26).

DATE OF SUBJECT'S WORK LIFE EXPECTANCY END:
November 21, 2046.

SUBJECT'S AGE AT SUBJECT'S WORK LIFE EXPECTANCY
END: 46.8 years old.

DATE OF SUBJECT'S FINAL SEPARATION FROM LABOR FORCE
(RETIREMENT): March 10, 2062.

SUBJECT'S AGE AT SUBJECT'S FINAL SEPARATION FROM
LABOR FORCE (RETIREMENT): 62.1 years old.

DATE OF SUBJECT'S LIFE EXPECTANCY END:
September 1, 2073.

SUBJECT'S AGE AT SUBJECT'S LIFE EXPECTANCY END:
73.6 years old.

ECONOMICS

CURRENT ECONOMIC STATUS: Incarcerated.

EXPECTED RELEASE DATE AND WORKFORCE ENTRY:
September 8, 2025

INCOME:	9/8/2025-3/10/2026	\$0.
	3/10/2026-9/8/2029	\$17,072.
	9/8/2029-11/21/2046	\$27,057.

GOVERNMENT ENTITLEMENT: Typical legally-required employer-provided entitlement benefits of employment.

FRINGE BENEFITS: Typical discretionary employer-provided fringe benefits of employment.

ECONOMIC DISABILITY: 100% due to death.

HOUSEHOLD SERVICES IMPAIRMENT: 100% due to death.

WORK LIFE EXPECTANCIES

SUBJECT'S WORK LIFE EXPECTANCY AT PRISON RELEASE AND WORKFORCE ENTRY (September 8, 2025): 21.2 years, 58% of years to final separation from the labor force (retirement). $0.58 \text{ proportion} \times 36.5 \text{ years} = 21.2 \text{ years}$. See Note #1 Scenario for explanation. Date of release is September 8, 2025; thus, date of subject's work life expectancy end is November 21, 2046.

SUBJECT'S WORK LIFE EXPECTANCY AT DATE OF REPORT: 23.8 years, the date of the report is 2.6 years before the date of prison release and workforce entry.

WORK LIFE EXPECTANCY AND WORKFORCE ABSENCE: Work life expectancy is continuous years of employment. Periods of time out of employment (e.g., job change, lay-off, child birth, education for improvement, etc.) occur during work years. These intervening periods out of employment are accounted for by placing them at the end of continuous years of employment. There is too much variation to select specific times within the continuous years of employment.

FINAL SEPARATION FROM LABOR FORCE (RETIREMENT)

SUBJECT'S YEARS TO FINAL SEPARATION FROM LABOR FORCE (RETIREMENT) AT PRISON RELEASE AND WORKFORCE ENTRY (September 8, 2025) (26 years old, nearest birthday): 36.5 years, gender and education specific. Gary R. Skoog, James E. Ciecka and Kurt V. Krueger, "The Markov Model of Years to Final Separation from the Labor Force 2012-17: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," Journal of Forensic Economics, Vol. 28, No. 1-2, September 2019, Table 13. Date of release is September 8, 2025; thus, date of subject's final separation from labor force (retirement) is March 10, 2062.

SUBJECT'S YEARS TO FINAL SEPARATION FROM LABOR FORCE (RETIREMENT) AT DATE OF REPORT: 39.1 years, the date of the report is 2.6 years before the date of prison release and workforce entry.

WORK LIFE EXPECTANCY, WORKFORCE ABSENCE AND YEARS TO FINAL SEPARATION FROM LABOR FORCE (RETIREMENT): The years to final separation from labor force occurs at the end of the continuous years of work (work life expectancy) plus the cumulative intervening time out of employment within a career. Consequently, years to final separation from labor force represents the date of retirement. This report, therefore, presents three periods: (1) employed working years (work life expectancy), (2) working years out of employment and (3) retired years (beginning after final separation from labor force).

LIFE EXPECTANCIES

SUBJECT'S LIFE EXPECTANCY AT DEATH: 51.9 years; gender, race and ethnicity specific. National Center for Health Statistics, U.S. Department of Health and Human Services, United States Life Tables, 2019, Table 14. <https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-19.pdf>. Date of death is October 7, 2021; thus, date of subject's life expectancy end is September 1, 2073.

SUBJECT'S LIFE EXPECTANCY AT DATE OF REPORT: 50.6 years, the date of the report is 1.3 years after the date of death (48.0 years at release).

BASIC ASSUMPTIONS

But for death, Jeremy Russell would have been released from prison on September 8, 2025 and entered the work force. He would have worked for a representative income for his work life expectancy, and he would have maintained a household for himself for his life expectancy. Mr. Russell would have worked a representative work life expectancy, had typical years to final separation from the labor force (retirement), provided typical household services and lived a typical life expectancy.

HUMAN CAPITAL ANALYSIS OF ECONOMIC LOSS

The economic loss incurred by Jeremy Russell is presented in six parts:

(1) Wages. Wage losses include projected future losses from report date to the end of work life expectancy (discounted to present value).

(2) Entitlement Benefits. Entitlement benefit losses represent employer's contributions for entitlement benefits which augment wages. These include projected future losses from report date to the end of work life expectancy (discounted to present value).

(3) Fringe Benefits. Fringe benefit losses represent employer's contributions for fringe benefits which augment wages. These include projected future losses from report date to the end of work life expectancy (discounted to present value).

(4) Household Services. Household service losses represent the value of the previously uncompensated activities necessary for daily life. These include projected future losses from report date to end of life expectancy (discounted to present value).

(5) Summary of Documentation. Formal documentation utilized is summarized in a list.

(6) Summary. A table summarizes the respective totals for the economic loss incurred.

PART I: WAGES
(Future)

Future
(Discounted to Present Value)

Future wage losses are incurred during a remaining work life expectancy of 21.2 years from the date of prison release and workforce entry.

1. Wages,	\$525,161. (#1	
2. Taxes, U.S. and MS,	(37,960.) (#2	
3. Consumption Allowance, .	(487,201.) (#3	
4. Adjusted Income,	0.	
5. Discount to present value,		\$0. (#4
<u>Total</u>		
6. TOTAL DISCOUNTED LOST WAGES,		\$0.

Note #1: "Post-release

...
 In the first few months, formerly incarcerated people were earning just 53% of the median US worker's wage. And after four years of seeking and obtaining irregular employment, the study population was making less than 84 cents for every dollar of the US median wage (which, in 2014, was about \$28,851).

...
 Employment may be one of the most important benchmarks of reentry, yet it took formerly incarcerated people an average of over six months to find their first job after release. As such, many did not maintain employment over the entire four-year study period, and the average person in the study had 3.4 jobs over that time. If that sounds erratic, it is: The average person is employed for 78% of the weeks between the ages of 18 and 54, while people in the study's cohort were employed just 58% of the time post-release." Prison Policy Initiative, New Data on Formerly Incarcerated People's Employment Reveal Labor Market Injustices. February 8, 2022. <https://www.prisonpolicy.org/blog/2022/02/08/employment/>.

Scenario

Work Life Expectancy at Release

"people in the study's cohort were employed just 58% of the time post-release" (See above)

At release, subject would have been a 25.6 year-old man (nearest birthday: 26). The years to final separation from the labor force (retirement) for a 26 year-old male without a high school diploma is 36.5 years. Gary R. Skoog, James E. Cieccka and Kurt V. Krueger, "The Markov Model of Years to Final Separation from the Labor Force 2012-17: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," Journal of Forensic Economics, Vol. 28, No. 1-2, September 2019, Table 13.

Thus, subject would be employed 58% of the time that he was in the labor force. This provides a work life expectancy of 0.58 proportion x 36.5 years = 21.2 years. During the remaining 42% of his time in the labor force ($36.5 - 21.2 = 15.3$ years), he would be unemployed. Unemployment is typically not uniform over the years, so forensic economics practice is to put the employed time in the beginning and unemployed time at the end of labor force time.

Annual Earnings at Release

"it took formerly incarcerated people an average of over six months to find their first job after release" (See above)

"In the first few months, formerly incarcerated people were earning just 53% of the median US worker's wage. And after four years of seeking and obtaining irregular employment, the study population was making less than 84 cents for every dollar of the US median wage (which, in 2014, was about \$28,851)." (See above)

\$28,851 in 2014 with wage inflation would increase to \$38,493 in 2022 (an average compounded 3.73% rate). U.S. Federal Reserve Bank of St. Louis, Federal Reserve Economic Data (FRED), CES0500000030, Average Weekly Earnings of Production and Nonsupervisory Employees, Total Private, Dollars per Week, Monthly, Seasonally Adjusted. <https://fred.stlouisfed.org>.

Mississippi wages are 0.8368 proportion of national wages. Expectancy Data, The Dollar Value of a Day, 2020 Dollar Valuation, 2021, Table 414. So, the Mississippi worker's median wage in 2022 would be 0.8368 proportion x \$38,493/year = \$32,211/year.

Following release, subject would be unemployed for six months and during the next three and one-half years, subject's wage would be $0.53 \text{ proportion} \times \$32,211/\text{year} = \$17,072/\text{year}$. Thereafter, subject's wage for his work life expectancy would be $0.84 \text{ proportion} \times \$32,211/\text{year} = \$27,057/\text{year}$.

Period

10/7/2021-2/8/2023 Unemployed
 2/8/2023-9/8/2025 Unemployed
 9/8/2025-3/10/2026 Unemployed
 3/10/2026-9/8/2029 53% Pay (\$17,072)
 9/8/2029-11/21/2046 84% Pay (\$27,057)

10/7/2021 .. Date of Death
 2/8/2023 ... Date of Report
 9/8/2025 ... Projected Prison Release
 3/10/2026 .. Projected First Paying Job
 9/8/2029 ... Projected Higher Paying Jobs
 11/21/2046 . Worklife Expectancy End

3/10/2026-12/31/2026 is 0.8104 year. Thus, subject's year 2026 earnings would be $0.8104 \times \$17,072 = \$13,835$.

1/1/2029-9/8/2029 is 0.6872 year and 9/8/2029-12/31/2029 is 0.3128 year. Year 2029 earnings, therefore, would be $[(0.6872)(\$17,072) + (0.3128)(\$27,057)] = \$11,732 + 8,463 = \$20,195$.

1/1/2046-11/21/2046 is 0.8898 year. Year 2046 earnings would be $(0.8898)(\$27,057) = \$24,075$.

Subject's annual earnings through worklife expectancy would be:

<u>Year</u>	<u>Earnings</u>
2026	\$13,835.
2027-2028	\$17,072.
2029	\$20,195.
2030-2045	\$27,057.
2046	\$24,075.

Note #2: Mississippi is used as state of residence. Subject's combined federal and state tax rate (single filing) is:

2026-2026: 0.77%
2027-2028: 3.30%
2029-2029: 5.14%
2030-2045: 7.87%
2046-2046: 6.72%

U.S. Internal Revenue Service, 2022 Form 1040 Instructions. <https://www.irs.gov/pub/irs-pdf/i1040gi.pdf>. Mississippi Department of Revenue, 2022 Mississippi Resident Individual Income Tax Instructions, Form 80-100. <http://www.dor.ms.gov/sites/default/files/Forms/Individual/80100221.pdf>.

Note #3: Subject's consumption expenditure is that portion of family gross income spent on items solely for the individual's personal benefit.

Subject's consumption expenditure percentage of gross family income is 100% for all of the Russell earnings: \$13,835, \$17,072, \$20,295, \$27,057 and \$24,075.

Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Personal Consumption Tables 2016-17," Journal of Legal Economics, Vol. 25, No. 1-2, September 2019, Appendix 2, page 89.

Note #4: The procedure for discounting to present value is a Below Market Discount Rate (BMDR) procedure. Attorneys have advised this preparer that this procedure is in conformance with applicable case law. This procedure is in conformance with current procedures and practices of the forensic economics profession.

U.S. Government 10-year bond rates, 1982-2021, average 5.46% annually. President of the United States, Economic Report of the President, 2022, Table B-42. <https://www.whitehouse.gov/wp-content/uploads/2022/04/ERP-2022.pdf>.

During the same period, the general Consumer Price Index (CPI-U) climbed an average 2.78%, U.S. Bureau of Labor Statistics, Inflation Rate, CPI-U, <https://data.bls.gov/pdq/SurveyOutputServlet> (<https://data.bls.gov/cgi-bin/srgate> to generate: Series ID: CUUS0000SA0).

Productivity over the period 1982-2021 averaged 1.17%. President of the United States, Economic Report of the President, 2022, Table B-32. <https://www.whitehouse.gov/wp-content/uploads/2022/04/ERP-2022.pdf>.

The subject's income loss is net after income taxes, so in equity, the interest earned on any award must also be after taxes -- a factor which reduces the BMDR 0.04% during 2026-2026, 0.18% during 2027-2028, 0.28% during 2029-2029, 0.43% during 2030-2045 and 0.37% during 2046-2046.

Thus, the BMDR is 1.47% (5.46% less 2.78% less 1.17% less 0.04%) during 2026-2026, 1.33% (5.46% less 2.78% less 1.17% less 0.18%) during 2027-2028, 1.23% (5.46% less 2.78% less 1.17% less 0.28%) during 2029-2029, 1.08% (5.46% less 2.78% less 1.17% less 0.43%) during 2030-2045 and 1.14% (5.46% less 2.78% less 1.17% less 0.37%) during 2046-. Attorneys have advised this preparer of this precedent: "we do not believe a court adopting such an approach in a suit under P5(b) should be reversed if it adopts a rate between 1 and 3% and explains its choice." Supreme Court of the United States, Jones & Laughlin Steel Corp. v. Pfeifer, No. 82-131, 462 U.S. 523, decided June 15, 1983.

PART II: ENTITLEMENT BENEFITS
(Future)

These economic losses are benefits with monetary value that the subject would have lost besides wages during a 21.2 year work life expectancy at the time of prison release and workforce entry.

Future
(Discounted to Present Value)

Future entitlement benefit losses are incurred during a remaining work life expectancy of 21.2 years from the date of prison release and workforce entry.

- | | | |
|----|----------------------------------|---------------|
| 7. | Entitlement benefits, ... | \$86,390. (#5 |
| 8. | Discount to present value, | \$73,205. (#6 |

Total

- | | | |
|----|--|-----------|
| 9. | TOTAL DISCOUNTED LOST ENTITLEMENT
BENEFITS, | \$73,205. |
|----|--|-----------|

Note #5: Entitlement benefits are employer-paid compensation, in addition to paycheck wages, that is mandated by law (i.e., the employee is entitled to receive those benefits).

Entitlement benefits are the employer payments for Social Security, Medicare Insurance, Health Insurance, Workers Compensation and Unemployment Compensation. These benefits are entitlements because they are legally required for individuals in covered employment. In 2020, "UI-covered employment reported by these sources constituted a virtual census (96.8 percent) of employees on nonfarm payrolls." U.S. Department of Labor. U.S. Bureau of Labor Statistics. Employment and Wages, Annual Averages, 2020. <http://www.bls.gov/cew/publications/employment-and-wages-annual-averages/current/home.htm>. Since 96.8% of jobs must provide these entitlement benefits, it is highly probable that subject would have received these entitlement benefits.

Social Security and Medicare Insurance

(Social Security, Survivors Insurance, Disability Insurance and Medicare Insurance.) Social Security benefits are for old age, survivors and disability. Thus, the entitlement benefits of Social Security, Survivors Insurance and Disability Insurance are known as Old Age, Survivors and Disability Insurance (OASDI), a program that Congress approved in 1935. Medicare Insurance is a separate program and trust fund that Congress passed in 1965.

The entitlement benefits of OASDI and Medicare are additional compensation to the worker and an economic loss. The employer's contribution is 7.65% and has components of 5.30% for the Social Security and Survivors Insurance Trust Fund, 0.90% for Disability Insurance Trust Fund and 1.45% for Medicare Insurance Trust Fund. U.S. Social Security Administration, Trust Fund Data: Social Security & Medicare Tax Rates. <http://www.ssa.gov/oact/progdata/taxRates.html>. U.S.

Social Security Administration, Trust Fund Data: Social Security Tax Rates. <http://www.ssa.gov/oact/progdata/oasdiRates.html>.

"..., it is assumed that the analysis of economic loss would extend only through the deceased's estimated worklife. As life expectancy exceeds worklife, it is necessary to account for consumption from the end of worklife to the end of life expectancy. The authors recommend using an assumption that pension and social security receipts will be sufficient to offset post worklife consumption."

Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Consumption Tables, 1997-98 Update," Journal of Forensic Economics, Vol. 13, No. 3, Fall 2000, footnote 2, page 307.

Removing the Social Security and Survivors Insurance Trust Fund percentage as personal consumption during retirement leaves the combined Disability Insurance and Medicare Insurance percentage as $0.90\% + 1.45\% = 2.35\%$.

Health Insurance, Workers Compensation and Unemployment Compensation

(Health Insurance, Workers Compensation and Unemployment Compensation.) The national average for these entitlement benefits is 14.10% of wages. ProQuest, "Employer Costs for Employee Compensation per Hour Worked: 2020," ProQuest Statistical Abstract of the United States, 2022 Online Edition, Table 695. Bernan Press. <https://statabs-proquest-com.lynx.lib.usm.edu/sa/index.html>. (Accessed At: <https://libguides.lib.usm.edu/az.php?a=s>).

Entitlement Benefits

The combined Disability Insurance, Medicare Insurance, Health Insurance, Workers Compensation and Unemployment Compensation percentage is 2.35% + 14.10% = 16.45%. Thus, the annual entitlement loss is:

2026:	\$13,835 x 0.1645 = \$2,276
2027-2028:	\$17,072 x 0.1645 = \$2,808
2029:	\$20,195 x 0.1645 = \$3,322
2030-2045:	\$27,057 x 0.1645 = \$4,451
2046:	\$24,075 x 0.1645 = \$3,960

No Consumption Deduction

There is no consumption deduction for entitlement benefits. Gerald D. Martin and Marc A. Weinstein, Determining Economic Damages, Costa Mesa, CA: James Publishing Company, 2012, page 4-28 and Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Personal Consumption Tables 2011-12," Journal of Legal Economics, Vol. 21, No. 1, October 2014, page 42.

Note #6: op.cit., Note #4.

PART III: FRINGE BENEFITS
(Future)

The subject's employer contributes to fringe benefits of employment. This economic loss is a benefit with monetary value which the subject lost besides wages during a 21.2 year work life expectancy at the time of prison release and workforce entry.

Future
(Discounted to Present Value)

Future fringe benefit losses are incurred during a remaining work life expectancy of 21.2 years from the date of prison release and workforce entry.

10. Fringe benefits,	\$0. (#7	
11. Discount to present value,		\$0. (#8
<u>Total</u>		
12. TOTAL DISCOUNTED LOST FRINGE BENEFITS,		\$0.

Note #7: Fringe benefits are employer-paid compensation, in addition to paycheck wages, that is discretionary for the employer.

All workers have 72% access for retirement benefits. Thus, it is probable that subject would have received this fringe benefit. U.S. Department of Labor, Bureau of Labor Statistics, National Compensation Survey: Employee Benefits in the United States, March 2021, Table 2. Retirement benefits: Access, participation, and take-up rates, civilian workers, March 2021. <https://www.bls.gov/ncs/ebs/benefits/2021/employee-benefits-in-the-united-states-march-2021.pdf>.

"..., it is assumed that the analysis of economic loss would extend only through the deceased's estimated worklife. As life expectancy exceeds worklife, it is necessary to account for consumption from the end of worklife to the end of life expectancy. The authors recommend using an assumption that pension and social security receipts will be sufficient to offset post worklife consumption."

Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Consumption Tables, 1997-98 Update," Journal of Forensic Economics, Vol. 13, No. 3, Fall 2000, footnote 2, page 307.

Consequently, the fringe benefit calculation does not include pension benefits which are considered to be personal consumption in retirement.

Note #8: op.cit., Note #4.

PART IV: HOUSEHOLD SERVICES
(Future)

People typically provide more than a pay check to support their families and/or themselves. These contributions (e.g., household chores, shopping, fixing things, etc.) are known as household services.

Future
(Discounted to Present Value)

Future household service
losses are incurred
during a remaining life
expectancy of 48.0 years
at the date of prison
release .

13. Household services, \$614,197. (#9
14. Discount to present value, \$303,641. (#10

Total

15. TOTAL DISCOUNTED LOST
HOUSEHOLD SERVICES, \$303,641.

Note #9: If not for death, subject would have provided:

Table 285: Single men, Unemployed, All ages, Living alone:

20.06 hours per week (valued at 0.8368 proportion x \$48.15 = \$40.29 per day) on household services from date of prison release (September 8, 2025) until date of subject's first employment (March 10, 2026),

Table 267: Single men, Employed full-time, Less than 45 years old, Living alone:

12.62 hours per week (valued at 0.8368 proportion x \$30.15 = \$25.23 per day) on household services from date of subject's first employment (March 10, 2026) until subject's age 45 (February 12, 2045),

Table 268: Single men, Employed full-time, Ages 45 through 54, Living alone:

15.33 hours per week (valued at 0.8368 proportion x \$36.82 = \$30.81 per day) on household services from subject's age 45 (February 12, 2045) until date of subject's work life expectancy end (November 21, 2046),

Table 285: Single men, Unemployed, All ages, Living alone:

20.06 hours per week (valued at 0.8368 proportion x \$48.15 = \$40.29 per day) on household services from date of subject's work life expectancy end (November 21, 2046) until date of subject's final separation from the labor force (retirement) (March 10, 2062) and

Table 306: Single men, Retired, Ages 62 through 74, Living alone:

22.02 hours per week (valued at 0.8368 proportion x \$53.33 = \$44.63 per day) on household services from date of subject's final separation from the labor force (retirement) (March 10, 2062) until date of subject's life expectancy end (September 1, 2073).

Expectancy Data, The Dollar Value of a Day: 2020 Dollar Valuation. Shawnee Mission, Kansas, 2021, Tables 285, 267, 268 and 306.

Mississippi is used as state of residence. The proportionate adjustment to the dollar value of a day is the national to Mississippi wage adjustment. Expectancy Data, The Dollar Value of a Day: 2020 Dollar Valuation. Shawnee Mission, Kansas, 2021, Table 414.

Household service weeks are seven-day weeks. Thus, the annual household services loss is:

Date of prison release and workforce entry (September 8, 2025) until date of subject's first employment (March 10, 2026):
 $\$40.29/\text{day} \times 365 \text{ days/year} = \$14,706/\text{year},$

Date of subject's first employment (March 10, 2026) until subject's age 45 (February 12, 2045):
 $\$25.23/\text{day} \times 365 \text{ days/year} = \$9,209/\text{year},$

Subject's age 45 (February 12, 2045) until date of subject's work life expectancy end (November 21, 2046):
 $\$30.81/\text{day} \times 365 \text{ days/year} = \$11,246/\text{year},$

Date of subject's work life expectancy end (November 21, 2046) until date of subject's final separation from the labor force (retirement) (March 10, 2062):
 $\$40.29/\text{day} \times 365 \text{ days/year} = \$14,706/\text{year} \text{ and}$

Date of subject's final separation from the labor force (retirement) (March 10, 2062) until date of subject's life expectancy end (September 1, 2073):
 $\$44.63/\text{day} \times 365 \text{ days/year} = \$16,290/\text{year}.$

Personal Consumption

Deducting personal consumption from household services is often proposed. The latest edition of the forensic economics profession textbook addresses this issue by stating, "At this time, we feel it best to note this issue but to suggest that no adjustment for self consumption be made until an appropriate study is made." Stanley P. Stephenson and David A Macpherson, Determining Economic Damages, Revision 27. Costa Mesa, CA: James Publishing, 2019. Page 6-15.

The forensic economics profession has had a decades-long discussion on the issue of deducting personal consumption from household services in wrongful death cases. The discussion reached the professional journal level in 1993 with Robert Trout and Carroll Foster, "Estimating A Decedent's Consumption in Wrongful Death Cases," Journal of Forensic Economics 6(2), 1993. That article posed the issue but was unable to provide a conceptual basis for deducting personal consumption from household services or a methodology for measurement. Consequently, that article concluded, "There has been no reliable study completed on how to allocate these uncompensated services among the categories of public or jointly consumed goods and individually consumed goods."

In the years since 1993, this issue has had substantial profile and professional examination. Despite this length of time and the significant interest in the subject, no reliable study has been forthcoming. Consequently, the annually revised forensic economics textbook, Determining Economic Damages, published the conclusion stated above in 2019.

The professional discussion largely sought a result (personal consumption from household services) while ignoring the absence of a rationale for obtaining that result. By ignoring a rationale, measurement (dollar value of personal consumption) was

impossible. Consequently, measurement has been the most visible failure in that research.

Determining Economic Damages emphasizes the need for an "appropriate study," echoing Trout and Foster 25 years earlier. Such a study has not been forthcoming for decades, despite the interest, and this author's opinion is that such a study will not be forthcoming in the future because of fundamental conceptual problems. Those conceptual problems relate to the nature of household services being maintenance activities not consumable goods.

The sections below provide expanded discussion on: (1) the long-held literature recognition that personal consumption applies only to income; therefore, not to benefits or household services; (2) personal consumption also applies to pension income during retirement years; (3) the joint nature of household services and (4) the nature of household services as maintenance activities; hence, the absence of personal consumption characteristics.

Personal Consumption Only From Income

"In virtually all wrongful death cases ... a deduction must be made for the amount of income that would have been consumed personally by the deceased." Gerald D. Martin and Marc A. Weinstein, Determining Economic Damages, Revision 24. Costa Mesa, CA: James Publishing Company, 2012, page 5-2.

"The resulting percentages are applied to total consumer unit pretax income to determine the necessary consumption allowance, which is subtracted from the pretax earnings of the decedent in arriving at the loss to the estate. ... This percentage is applied to total consumer unit income to arrive at the amount of the consumption adjustment." Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Personal Consumption Tables

2016-17," Journal of Legal Economics, Vol. 25, No. 1-2, September 2019, pages 75-76.

Personal consumption is uniquely related to income. Martin and Weinstein emphasize this point when discussing fringe benefits. "The deceased, had he lived would have consumed part of his income, but would not have consumed any portion of fringe benefits for the simple reason that he does not receive the employer's contribution in his paycheck." Gerald D. Martin and Marc A. Weinstein, Determining Economic Damages, Revision 24. Costa Mesa, CA: James Publishing Company, 2012, page 4-28.

All three quotes from Martin and Weinstein and Ruble, Patton and Nelson specifically state that personal consumption applies only to income. Part I: Wages of this report addresses personal consumption (from income).

Personal Consumption during Retirement

In addition to personal consumption being removed from income during working years (Part I: Wages), this report also deducts personal consumption during retirement in Part II: Entitlement Benefits and Part III: Fringe Benefits.

"..., it is assumed that the analysis of economic loss would extend only through the deceased's estimated worklife. As life expectancy exceeds worklife, it is necessary to account for consumption from the end of worklife to the end of life expectancy. The authors recommend using an assumption that pension and social security receipts will be sufficient to offset post worklife consumption."

Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Consumption Tables, 1997-98 Update," Journal of Forensic Economics, Vol. 13, No. 3, Fall 2000, footnote 2, page 307.

Review of Parts II and III will show that the benefits of Social Security retirement and employer company pension support are not included as economic losses. Rather in accordance with the Ruble, Patton and Nelson quote above, those "pension and social security receipts" are ignored as personal consumption during retirement.

It is noted that social security and pension receipts are personal consumption in retirement.

Household Services Provide Joint Benefits

Consumption of items purchased out of income, a Part I: Wages topic, is done by one of three entities:

- (1) the named individual,
- (2) another individual or
- (3) jointly by multiple individuals who may include the named individual.

"When an individual family member uses family income to make a purchase that is exclusively for his or her own benefit, then it usually can be considered a personal consumption item." Gerald D. Martin and Marc A. Weinstein, Determining Economic Damages, Revision 24. Costa Mesa, CA: James Publishing Company, 2012, page 5-2. In only (1) above are items deducted in a forensic economics report as personal consumption. This is because in only (1) above are items consumed solely by the named individual. Thus, consumption by others and joint consumption (even if the named individual is a party) are not considered personal consumption in a forensic economics report.

This report uses Expectancy Data, The Dollar Value of a Day: 2020 Dollar Valuation. Shawnee Mission, Kansas, 2021 for valuation of household services. Tables 1-385 address different household compositions, and they uniformly categorize household services in two categories and twelve subcategories:

Household Production:

Inside Housework;
Food, Cooking & Clean-up;
Pets, Home & Vehicles;
Household Management;
Shopping;
Obtaining Services and
Travel for Household Activity and

Caring and Helping:

Household Children;
Household Adults;
Non-Household Members;
Travel for Household Members and
Travel for Non-Household Members.

Tables 386-412 provide great detail on the composition of those respective services.

Review of the twelve subcategories shows that all twelve subcategories are the provision of services for joint benefit, and therefore, none fall into the category of personal consumption, even if personal consumption applied to household services provision.

Household Services are Maintenance Activities Not Consumption of Income

There is no personal consumption deduction for household services provision because those services are provided for maintenance rather than received as income to be consumed.

Personal consumption is the process of using up something for one's own personal benefit. For example, the purchase of a shirt is personal consumption out of income since the shirt will be used (consumed) by a person until the end of the shirt's useful life. Then, the shirt will be disposed of as a used-up item that provides no further utility. Likewise, haircuts, toiletries, underwear and prosthetic devices purchased from income would be considered personally consumed items.

Review of the twelve subcategories in The Dollar Value of a Day: 2020 Dollar Valuation that are listed above show that income consumption to disposal is not the activity addressed in household services. Rather, maintenance of value, health, condition or other characteristics are the objects of household services.

In both multi-person and single person households, all twelve subcategories are maintenance activities that do not involve income consumption to disposal, and therefore, none fall into the category of personal consumption.

Conclusion

Consequently, there is no personal consumption deduction for household services provision.

Methodology

Attorneys have advised this preparer that the United States District Court for the Southern District of Mississippi has accepted the methodology herein used for household services loss determination.

U.S. District Court for the Southern District of Mississippi, Southern Division. "Order Granting in Part and Denying in Part Defendant's Daubert Motion to Exclude Plaintiff's Expert, Dr. George Carter' Expert Testimony, ...: c. Dr. Carter's Opinion Regarding Loss of Household Services," Rosa Ashford and Otis Ashford, Plaintiffs v. Wal-Mart Stores, LP, Defendant. January 15, 2013 decided. Civil No. 1:11-cv-57-HSO-JMR. 2013 U.S. Dist. LEXIS 5852. Section II.B.2.c.

U.S. District Court for the Southern District of Mississippi, Southern Division. "Order Denying Motion to Exclude Dr. Carter's Loss of Household Services," Renea Simmons, Shirley Gaines, Harry Simmons, Pansy Simmons, and Michael Fortenberry, individually, each in their own right and on behalf of the wrongful death beneficiaries of Willie Simmons, deceased v. Plaza Insurance Company, Inc., Defendant. June 10, 2016. Cause No. 1:15cv288-LFG-RHW.

U.S. District Court for the Southern District of Mississippi, Southern Division. "Order Denying Defendant's Motion to Exclude And/Or Limit The Opinions and Testimony of Dr. George H. Carter," Dustin Riggio, individually, and in his representative capacity as Administrator of the Estate of Kim Mills, deceased, and on behalf of all wrongful death beneficiaries of Kim mills, deceased v. Isreal Pruneda; SMC Transport LLC; Werner Enterprises, Inc.; and John Does 1-5. December 12, 2019. Cause No. 1:18CV218-LG-RHW.

Note #10: The procedure for discounting to present value is a Below Market Discount Rate (BMDR) procedure. Attorneys have advised this preparer that this procedure is in conformance with applicable case law. This procedure is in conformance with current procedures and practices of the forensic economics profession.

U.S. Government 10-year bond rates, 1982-2021, average 5.46% annually. President of the United States, Economic Report of the President, 2022, Table B-42. <https://www.whitehouse.gov/wp-content/uploads/2022/04/ERP-2022.pdf>.

During the same period, the general Consumer Price Index (CPI-U) climbed an average 2.78%, U.S. Bureau of Labor Statistics, Inflation Rate, CPI-U, <https://data.bls.gov/pdq/SurveyOutputServlet> (<https://data.bls.gov/cgi-bin/srgate> to generate: Series ID: CUUS0000SA0).

The subject's household services loss is net after income taxes, so in equity, the interest earned on any award must also be after taxes -- a factor which reduces the BMDR 0.04% during 2026-2026, 0.18% during 2027-2028, 0.28% during 2029-2029, 0.43% during 2030-2045, 0.37% during 2046-2046 and 0.00% during 2046-2073. Subject is assumed to not work during retirement.

Thus, the BMDR is 2.64% (5.46% less 2.78% less 0.04%) during 2026-2026, 2.50% (5.46% less 2.78% less 0.18%) during 2027-2028, 2.40% (5.46% less 2.78% less 0.28%) during 2029-2029, 2.25% (5.46% less 2.78% less 0.43%) during 2030-2045, 2.31% (5.46% less 2.78% less 0.37%) during 2046-2046, and 2.68% (5.46% less 2.78% less 0.00%) during 2046-2073. Attorneys have advised this preparer of this precedent: "we do not believe a court adopting such an approach in a suit under P5(b) should be reversed if it adopts a rate between 1 and 3% and explains its choice." Supreme Court of the United States, Jones & Laughlin Steel Corp. v. Pfeifer, No. 82-131, 462 U.S. 523, decided June 15, 1983.

PART V: SUMMARY OF DOCUMENTATION

In drafting this report, the following documents were relied upon:

1. Gary R. Skoog, James E. Ciecka and Kurt V. Krueger, "The Markov Model of Years to Final Separation from the Labor Force 2012-17: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors," Journal of Forensic Economics, Vol. 28, No. 1-2, September 2019;
2. U.S. Department of Health and Human Services, United States Life Tables, 2019. <https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-19.pdf>;
3. Prison Policy Initiative, New Data on Formerly Incarcerated People's Employment Reveal Labor Market Injustices. February 8, 2022. <https://www.prisonpolicy.org/blog/2022/02/08/employment/>;
4. U.S. Federal Reserve Bank of St. Louis, Federal Reserve Economic Data (FRED), CES0500000030, Average Weekly Earnings of Production and Nonsupervisory Employees, Total Private, Dollars per Week, Monthly, Seasonally Adjusted. <https://fred.stlouisfed.org>;
5. Expectancy Data, The Dollar Value of a Day: 2020 Dollar Valuation. Shawnee Mission, Kansas, 2021;
6. U.S. Internal Revenue Service, 2022 Form 1040 Instructions. <https://www.irs.gov/pub/irs-pdf/il040gi.pdf>;
7. Mississippi Department of Revenue, 2022 Mississippi Resident Individual Income Tax Instructions, Form 80-100. <http://www.dor.ms.gov/sites/default/files/Forms/Individual/80100221.pdf>;
8. Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Personal Consumption Tables 2016-17," Journal of Legal Economics, Vol. 25, No. 1-2, September 2019;
9. President of the United States, Economic Report of the President, 2022. <https://www.whitehouse.gov/wp-content/uploads/2022/04/ERP-2022.pdf>;

10. U.S. Bureau of Labor Statistics, Inflation Rate, CPI-U. <https://data.bls.gov/pdq/SurveyOutputServlet> (<https://data.bls.gov/cgi-bin/srgate> to generate: Series ID: CUUS0000SA0);
11. Supreme Court of the United States, Jones & Laughlin Steel Corp. v. Pfeifer, No. 82-131, 462 U.S. 523, decided June 15, 1983;
12. U.S. Department of Labor. U.S. Bureau of Labor Statistics. Employment and Wages, Annual Averages, 2020. <http://www.bls.gov/cew/publications/employment-and-wages-annual-averages/current/home.htm>;
13. U.S. Social Security Administration, Trust Fund Data: Social Security & Medicare Tax Rates. <http://www.ssa.gov/oact/progdata/taxRates.html>;
14. U.S. Social Security Administration, Trust Fund Data: Social Security Tax Rates. <http://www.ssa.gov/oact/progdata/oasdiRates.html>;
15. ProQuest, ProQuest Statistical Abstract of the United States, 2022 Online Edition. Bernan Press. <https://statabs-proquest-com.lynx.lib.usm.edu/sa/index.html>. (Accessed At: <https://libguides.lib.usm.edu/az.php?a=s>);
16. Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Consumption Tables, 1997-98 Update," Journal of Forensic Economics, Vol. 13, No. 3, Fall 2000;
17. Gerald D. Martin and Marc A. Weinstein, Determining Economic Damages, Revision 24. Costa Mesa, CA: James Publishing Company, 2012;
18. Michael R. Ruble, Robert T. Patton, and David M. Nelson, "Patton-Nelson Personal Consumption Tables 2011-12," Journal of Legal Economics, Vol. 21, No. 1, October 2014;

19. U.S. Department of Labor, Bureau of Labor Statistics, National Compensation Survey: Employee Benefits in the United States, March 2021, Table 2. Retirement benefits: Access, participation, and take-up rates, civilian workers, March 2021. <https://www.bls.gov/ncs/ebs/benefits/2021/employee-benefits-in-the-united-states-march-2021.pdf>;

20. Stanley P. Stephenson and David A Macpherson, Determining Economic Damages, Revision 27. Costa Mesa, CA: James Publishing, 2019;

21. Robert Trout and Carroll Foster, "Estimating A Decedent's Consumption in Wrongful Death Cases," Journal of Forensic Economics 6(2), 1993;

22. U.S. District Court for the Southern District of Mississippi, Southern Division. "Order Granting in Part and Denying in Part Defendant's Daubert Motion to Exclude Plaintiff's Expert, Dr. George Carter' Expert Testimony, ...: c. Dr. Carter's Opinion Regarding Loss of Household Services," Rosa Ashford and Otis Ashford, Plaintiffs v. Wal-Mart Stores, LP, Defendant. January 15, 2013 decided. Civil No. 1:11-cv-57-HSO-JMR. 2013 U.S. Dist. LEXIS 5852. Section II.B.2.c.;

23. U.S. District Court for the Southern District of Mississippi, Southern Division. "Order Denying Motion to Exclude Dr. Carter's Loss of Household Services," Renea Simmons, Shirley Gaines, Harry Simmons, Pansy Simmons, and Michael Fortenberry, individually, each in their own right and on behalf of the wrongful death beneficiaries of Willie Simmons, deceased v. Plaza Insurance Company, Inc., Defendant. June 10, 2016. Cause No. 1:15cv288-LFG-RHW and

24. U.S. District Court for the Southern District of Mississippi, Southern Division. "Order Denying Defendant's Motion to Exclude And/Or Limit The Opinions and Testimony of Dr. George H. Carter," Dustin Riggio, individually, and in his representative capacity as Administrator of the Estate of Kim Mills, deceased, and on behalf of all wrongful death beneficiaries of Kim mills, deceased v. Isreal Pruneda; SMC Transport LLC; Werner Enterprises, Inc.; and John Does 1-5. December 12, 2019. Cause No. 1:18CV218-LG-RHW.

PART VI: SUMMARY
(Discounted to Present Value)

<u>Loss Source</u>	<u>Future</u>	<u>Total</u>
16. Wages	\$0.	\$0.
17. Entitlement Benefits	73,205.	73,205.
18. Fringe Benefits	0.	0.
19. Household Services	303,641.	303,641.
20. TOTAL LOSS	\$376,846.	\$376,846.